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SCHULTE ROTH & ZABEL LLP
ATTN: JOEL E. LUTZKER
919 THIRD AVENUE
NEW YORK, NY 10022

EXAMINER	
KARIKARI, KWASI	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on 10/31/2008 have been fully considered but they are not persuasive.

In the remarks, the Applicant argues that the combination of Shimamura, Lee and Suso fails to disclose the claimed limitations;

["said optical axis of said camera module substantially coincident with said axial line, said axial line and said optical axis extending in a thickness direction of said mobile terminal device"] in claims 1 and 7.

The examiner, however respectfully disagrees with such an assertion since the examiner must give each presented claimed limitation, its broadest reasonable interpretation in light of the Applicant's specification. The examiner also notices that there is very little description in the claimed limitations which empirically narrows the manner in which the examiner must interpret such a relatively claimed limitations.

In contrast to Applicant's assertion, the combination of Shimamura and Lee teaches all the claimed limitations in claim 1; but explicitly fails to mention the **relative** claimed limitation "said **optical axis** of said camera module substantially coincident with said **axial line**, said axial line and said optical axis **extending in a thickness direction** of said mobile terminal device".

First, the claimed limitations; "optical axis, axial line and the optical axis extending in a thickness of direction of said mobile terminal device" are all relative terms and do not specifically limit one of the ordinary skill in the art to interpret such limitation otherwise.

Second, Suso, in addition to Shimamura and Lee, does mention a portable terminal that includes video camera that is accommodated in the coupling part 5; whereby the video camera is freely rotated in direction independent of the casing (see col. 1, lines 54-65; col. 3, lines 17-36, col. 4, lines 17-41, col. 6, lines 13-21, col. 8, line 51- col. 9, line 11 and Figs. 1a-d, 2a-b, 4 and 6a); which meets the argued claimed limitations.

The combination of Shimamura, Lee and Suso therefore teaches the claimed limitation of claims 1 and 7, which is directed to a wireless communication device that includes a camera module on its hinge/joint.

Claims 2-6 and 8-11 are rejected by virtue of their dependency of claims 1 and 7. Based on the above remarks, the rejection using Shimamura, Lee, Suso and Wakabayashi is being maintained and made Final as shown below.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-7 and 9-11 are rejected under U.S.C. 103(a) as being unpatentable over Shimamura et al., (U.S. 20030153372 A1), (hereinafter Shimamura), in view of Lee (U.S. 20040198433 A1), (hereinafter Lee) and further in view of Suso et al. (U.S 6,466,202), (hereinafter Suso).

Regarding claim 1, **Shimamura** discloses *a* mobile terminal device with a camera (cellular phone including a camera section, see Par. [0055] and Fig. 7A-D) comprising: two casings which are overlapped on each other (see casings 300 and 100, Fig. 7B);

connecting section (= biaxial hinge 300, see Fig. 1A-C) for connecting said two casings so that said two casings rotate around an axial line in parallel with a direction in which said two casings are overlapped (see Par. [0069]); and a camera (see item 121, Fig. 3C);

Shimamura fails to teach that the camera module having a lens and an image-taking element so as to form an optical axis passing through said lens and said image-taking element; said camera module being disposed inside of said connecting section with said optical axis of said camera module substantially coincident with said axial line; and said axial line and said optical axis extending in the thickness direction of said mobile terminal device .

Lee teaches a portable wireless terminal 100 including a camera inside a hinge and a camera lens (see Pars. [0011-15 and 0029]; and Figs. 1 and 3-7).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of **Lee** into the system of Shimamura for the benefit of achieving a portable wireless terminal with expanded range of photographic angle.

The combination of Shimamura and Lee fails specifically to teach said axial line and said optical axis "**being extended in the thickness direction"** of said mobile terminal device**".**

However, **Suso** discloses said axial line and said optical axis "**being extended in the thickness direction"** of said mobile terminal device (= video camera is incorporated in the coupling part 5, see col. 3, lines 17-36, col. 4, lines 17-41, col. 6, lines 13-21, col. 8, line 51- col. 9, line 11 and Figs. 1a-d, 2a-b, 4 and 6a).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of **Suso** into the system of Shimamura and Lee for the benefit of achieving a portable wireless terminal that includes a video camera whose direction can be freely changed (see col. 3, lines 17-31).

Regarding claim 2, as recited in claim 1, **Shimamura** further discloses the mobile terminal device with a camera further comprising:

a display section which displays an image which is taken by said camera module, wherein said display section is disposed so as to be substantially orthogonal to said axial line of either one of said two casings (see Par. [0097] and item 202 in Fig. 7A-D).

Regarding claim 3, as recited in claim 1, **Shimamura** further discloses the mobile terminal device with a camera further comprising:

a sensor which measures a relative angle made by one of said two casings on which said camera module is disposed and the other of said two casings on which said display section is disposed, wherein an image which is taken by said camera module is displayed on said display section in a rotated manner according to the measurement result by said sensor (= camera sense user image and records his/her image and displays the image on the display unit 202, see Par [0076-77 and 0097]).

Regarding claim 4, as recited in claim 2, the combination of **Shimamura and Lee** fails to disclose said camera module is fixed to said casing in which said display section is disposed.

However, **Suso** teaches that said camera module is fixed to said casing in which said display section is disposed (= video camera may be positioned on the outer casing 1, see col. 12, lines 7-17).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of **Suso** into the system of Shimamura and Lee for the benefit of achieving a portable wireless terminal that includes a video camera whose direction can be freely changed (see col. 3, lines 17-31).

Regarding claim 5, as recited in claim 3, **Shimamura** further discloses the mobile wherein an image which is taken by said camera module is rotated by 90 degrees with

no change to the aspect ratio of said image and then is displayed on said display section when the measurement result is that said relative angle is 90 degrees (= display control section 114 control and convert the displayed content, (see Par. [0070-71]).

Regarding claim 6, as recited in claims 1, **Shimamura** further discloses the mobile terminal device with a camera is a portable telephone (see Fig. 7A-D).

Regarding claim 7, **Shimamura** *discloses a* mobile terminal device with a camera (= cellular phone including a camera section, see Par. [0055] and Fig. 7A-D), comprising:

two casings which can be overlapped on each other (see casings 300 and 100, Fig. 7B);

a connecting section (= biaxial hinge 300, see Fig. 1A-C) for connecting said two casings so that said two casings rotate around an axial line in parallel with a direction in which said two casings are overlapped, wherein said connecting section has a fixed base member which is fixed on one of said two casings and a movable base member which is fixed on the other of said two casings and is fit in the peripheral surface of said fixed base member rotatably around said axial line (see Fig. 3A);

a hollow space provided in said fixed base member (= biaxial hinge with metal pivot shaft, see Par. [0045]).

Shimamura fails to teach the camera module having a lens and an image-taking element so as to form an optical axis passing through said lens and said image-taking

element, said camera module being disposed inside of said hollow space, with said optical axis substantially coincident with said axial line; and said axial line and said optical axis being disposed in the thickness direction of said mobile terminal device.

Lee teaches a portable wireless terminal 100 including a camera inside a hinge and a camera lens (see Pars. [0011-15 and 0029]; and Figs. 1 and 3-7).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Lee into the system of Shimamura for the benefit of achieving a portable wireless terminal with expanded range of photographic angle.

The combination of Shimamura and Lee fails specifically to teach said axial line and said optical axis "**being extended in the thickness direction"** of said mobile terminal device**".**

However, **Suso** discloses said axial line and said optical axis "**being extended in the thickness direction"** of said mobile terminal device (= video camera is incorporated in the coupling part 5, see col. 3, lines 17-31, col. 4, lines 17-41, col. 6, lines 13-21, col. 8, line 51- col. 9, line 10 and Figs. 1a-d, 2a-b, 4 and 6a).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Suso into the system of Shimamura and Lee for the benefit of achieving a portable wireless terminal that includes a video camera whose direction can be freely changed (see col. 3, lines 17-31).

Regarding **claim 9,** as recited in claim 1, **Shimamura** further discloses the mobile terminal device with a camera is a portable telephone (see Fig. 7A-D).

Regarding claim 10, as recited in claim 1, **Shimamura** further discloses the mobile terminal device with a camera further comprising a image-capturing window formed on one of said two casings at a position facing to said lens (= camera 121, see Fig. 3C and Par. 0077).

Regarding claim 11, as recited in claim 7, **Shimamura** further discloses the mobile terminal device with a camera further comprising a image-capturing window formed on one of said two casings at a position facing to said lens (= camera 121, see Fig. 3C and Par. 0077).

3. **Claim 8 is rejected under U.S.C. 103(a) as being unpatentable over Shimamura in view of Lee and further in view of Suso and further in view of Wakabayaski et al. (U.S. 5,666,565), (hereinafter Wakabayashi).**

Regarding claim 8, as recited in claim 7, **Suso** teaches that the mobile terminal device with a camera further comprising: a fixed cylinder as part of said camera module, which acts as a casing for said camera module (= a hole which the camera lens is fitted, see col. 4, lines 22-31).

The combination of **Shimamura, Lee and Suso** specifically fails to disclose a cam cylinder as part of said camera module, which is fit in the peripheral surface of said fixed cylinder movably along said axial line; a linear groove provided on the peripheral wall of said fixed cylinder in parallel with said axial line; a cam groove provided on the

peripheral wall of said cam cylinder in parallel with said axial line; and a pin provided with a lens on the tip thereof, which penetrates said linear groove to connect with said cam groove movably along said axial line.

However, **Wakabayaski** teaches a fixed cylinder (4) as part of said camera module, which acts as a casing for said camera module; a cam cylinder as part (16) of said camera module, which is fit in the peripheral surface of said fixed cylinder movably along said axial line; a linear groove (10a) provided on the peripheral wall of said fixed cylinder in parallel with said axial line; a cam groove (16a) provided on the peripheral wall of said cam cylinder in parallel with said axial line; and a pin provided with a lens on the tip thereof (lens group 12), which penetrates said linear groove to connect with said cam groove movably along said axial line (see column 4, lines 20-60 and Figs. 1 and 2).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Wakabayaski into the system of Shimamura, Lee and Suso for the benefit of achieving a portable terminal device that includes camera with focal length varying mechanism.

CONCLUSION

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully

consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. SEE MPEP 2141.02 [R-5] VI. PRIOR ART MUST BE CONSIDERED IN ITS ENTIRETY, INCLUDING DISCLOSURES THAT TEACH AWAY FROM THE CLAIMS: A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984) In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004). >See also MPEP §2123.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of 33the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwasi Karikari whose telephone number is 571-272-8566. The examiner can normally be reached on M-T (9am - 7pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8566. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kwasi Karikari/
Patent Examiner Art Unit 2617.

/Charles N. Appiah/
Supervisory Patent Examiner, Art Unit 2617